

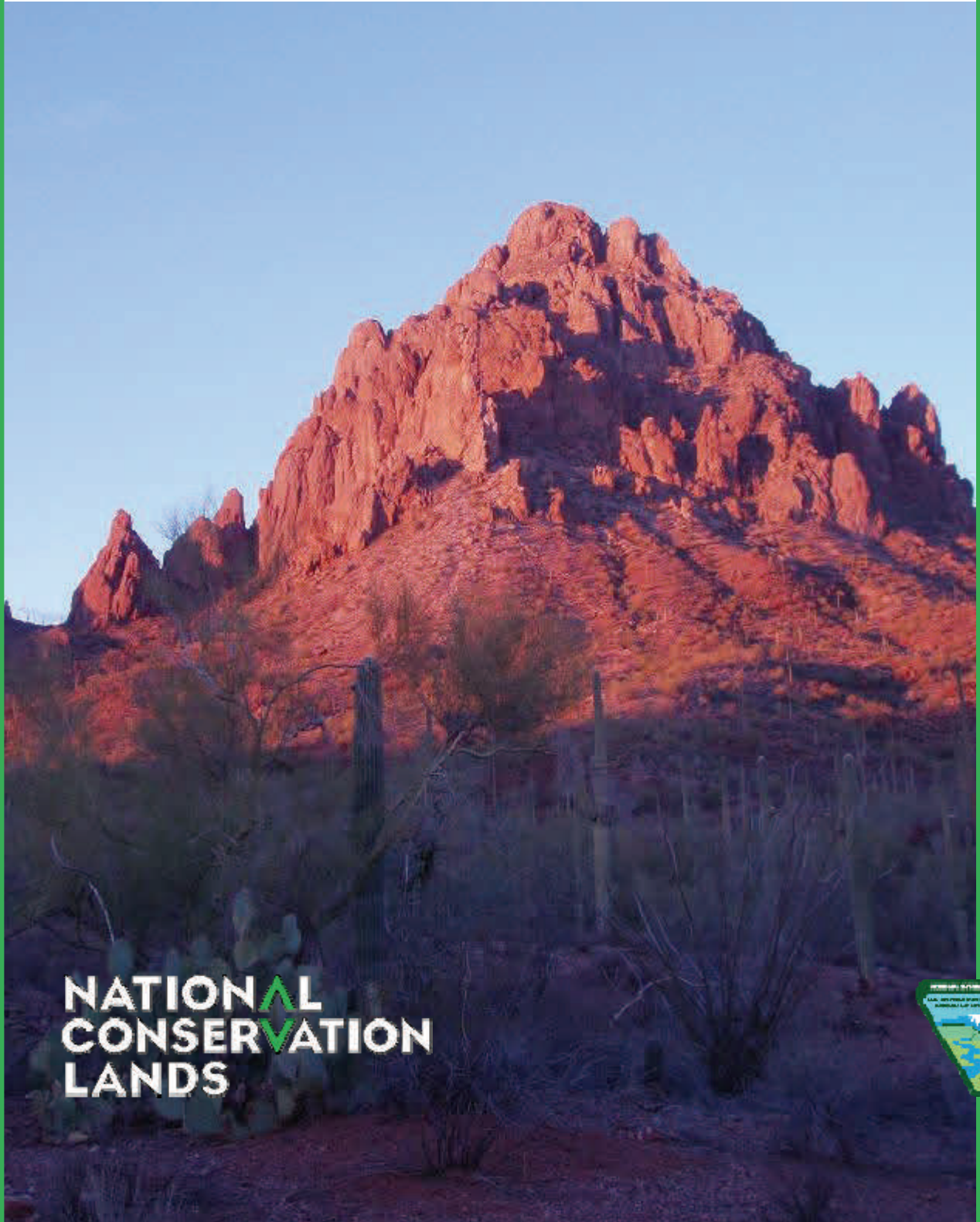
Ironwood Forest

National Monument

Manager's Annual Report
FY 2013

2013

Manager's Annual Report



NATIONAL
CONSERVATION
LANDS

Arizona



Table of Contents

1 Ironwood Forest Profile..... 1

2 Planning and NEPA 4

3 Year’s Projects and Accomplishments..... 7

4 Science 11

5 Resources, Objects, Values, and Stressors 12

6 Summary of Performance Measures..... 19

7 Manager’s Letter 20



Ironwood Forest Profile

Designating Authority

Designating Authority: Antiquities Act of 1906, Presidential Proclamation 7320

Date of Designation: June 12, 2000

Location and Acreage

Ironwood Forest National Monument (IFNM) is 30 miles northwest of Tucson, Arizona in Pima and Pinal counties.

The IFNM encompasses about 189,600 acres of land. The decisions in the Approved Resource Management Plan (RMP) apply to about 128,400 acres within the Monument boundaries that are public land administered by the Bureau of Land Management (BLM). The balance of the land consists of approximately 54,700 acres of State Trust land (administered by the Arizona State Land Department [ASLD]) and about 6,000 acres that are privately owned.

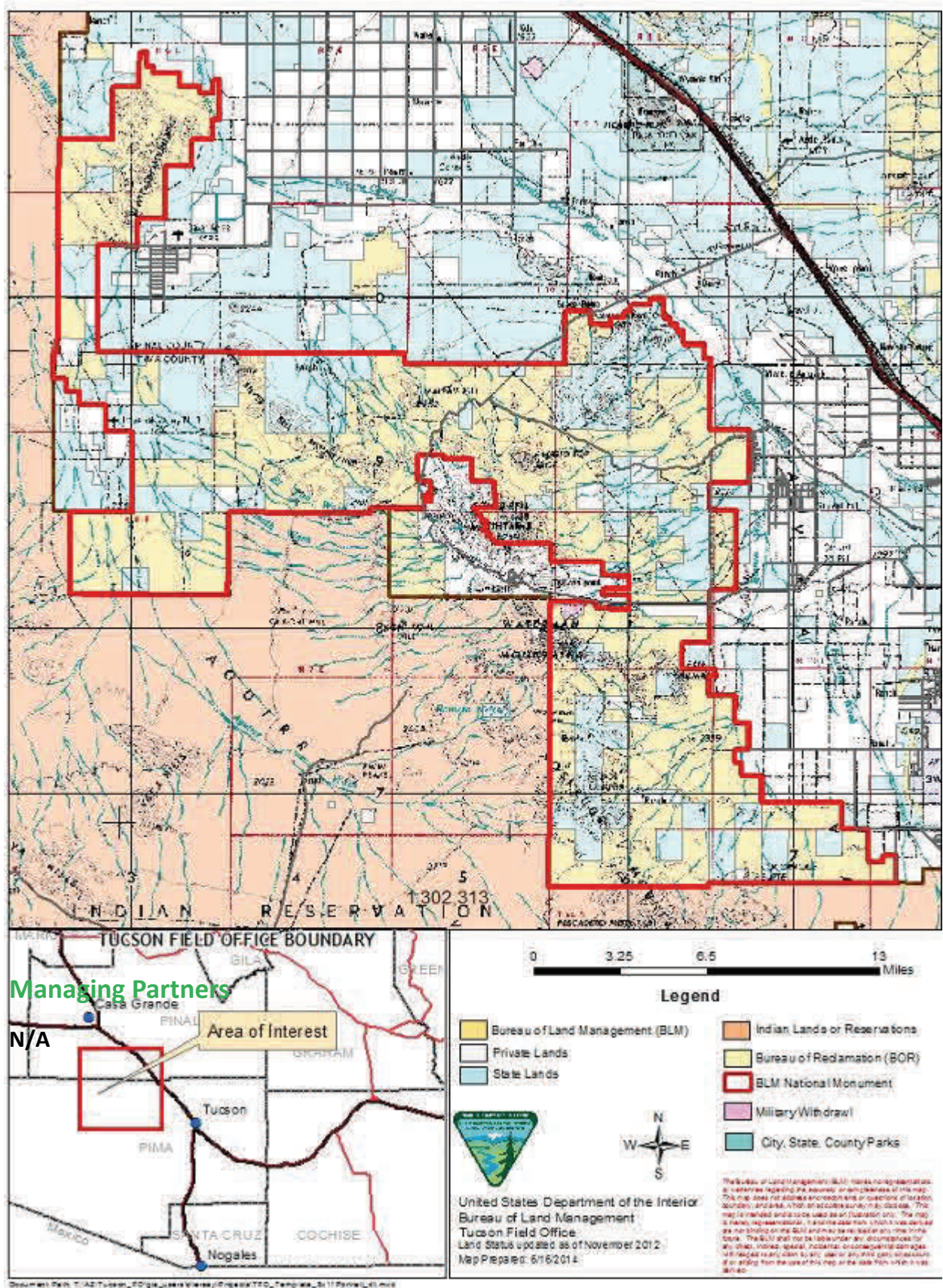
Contact Information

Unit Manager	Phone	E-mail	Mailing Address
Claire Crow	520-258-7242	ccrow@blm.gov	3201 E. Universal Dr. Tucson AZ, 85756

Field Office	District Office	State Office
Tucson Field Office	Gila District	Arizona

Field Office Manager	Phone	E-mail	Mailing Address
Viola Hillman	520-258-7200	vhillman@blm.gov	3201 E. Universal Dr. Tucson AZ, 85756

Ironwood Forest National Monument



Map of the Ironwood Forest National Monument

Staffing

Manager—Full time (also manages lands and activities in the north and west parts of the Field Office and supervises some resources staff on the Tucson Field Office table of organization)

Natural Resources Specialist— 80% (also works on lands and activities in the north and west parts of the Field Office)

Outdoor Recreation Planner— 40% (also works on lands and activities in the north and west parts of the Field Office)

Park Ranger—60% (also works on lands and activities in the north and west parts of the Field Office)

Two student interns from Southwest Conservation Corps (SCC) are funded through the Southern Arizona Project to conduct clean-up and reclamation activities of impacts to the Monument from human and drug smuggling activities related to the border with Mexico. These positions are generally filled for 8 months of the year.

Other employees of the Tucson Field Office staff work occasionally in the Monument on an as-needed and funds-permitting basis. The Park Ranger spent part of his time involved in undocumented immigrant (UDI)-related Southern Arizona Project activities. The two long-term SCC interns work primarily on border-related UDI issues of trash, road rehab, and fence repair, with occasional cross-training opportunities in recreation, range, natural resources, educational outreach and public contact.

2

Planning and NEPA

Status of RMP

The Ironwood Forest National Monument Resource Management Plan was approved on February 19, 2013. This year the staff began working on the Transportation and Travel Management Implementation Plan (TMIP) that will guide the monument in implementing the transportation and travel management decisions that were made in the RMP.

Status of Activity Plans

The TMIP will be completed by the end of Fiscal Year 2014 (FY14). It will implement travel management standards in signage, road and primitive road maintenance, route restrictions and closures.

Status of RMP Implementation Strategy

The Monument staff will be working on the RMP implementation strategy in (FY14).



The entire population of Nichol Turk's head cactus blooms on one day each year.

Key NEPA Actions and/or Authorizations

Six NEPA actions affected the IFNM in FY13.

EA Waterman Acquisition (initiated in FY13 & completed in FY14): This Environmental Assessment (EA) analyzed the effects of acquiring 358 acres of private land within the Monument using funds from the Land and Water Conservation Fund.

EA Ironwood Forest National Monument Transportation and Travel Management Implementation Plan (NEPA initiated in FY13 & completed in FY14): This is an EA that analyzes the impacts of full implementation of the plan to implement the route designations made in the IFNM RMP. The plan implements the route designations through a signage plan, road and primitive road maintenance, barriers and signage for route restrictions and closures.

EA Control of Invasive Grasses (NEPA initiated & completed in FY13): This EA analyzed the effects of treating buffelgrass and Bermuda grass with the herbicide Glyphosate. The project also called for hand removal of invasive grasses in areas deemed sensitive (such as presence of Nichol's Turk's head cactus).

EA Aguirre Fence (NEPA initiated in FY12 & completed in FY13): This EA analyzed the effects of protecting the historic Mission Santa Ana del Quiquiburitac through construction of new fence and maintenance of existing fence around the cultural site. The project included rerouting the Santa Rosa Road onto existing primitive roads bypassing the cultural resource management area.

CX Humane Border Water Stations Permit Renewal (NEPA initiated & completed in FY13): Authorizes the Humane Borders' three seasonal water stations located on the Monument.

CX Silver Bell Peak Wildlife Water Redevelopment (NEPA initiated & completed in FY12, project implemented in FY13): Authorizes the replacement of an existing wildlife water on the upper slopes of Silver Bell Peak within the Monument. Target species is desert bighorn sheep.

There are several utility rights of way (ROW) and two communication sites within the Monument. These ROWs routinely require site visits for inspections and maintenance activities and coordination with the lessees. There were no unusual activities within the Monument due to the routine maintenance and inspections.

There is one Recreation and Public Purposes lease within the Monument that was in existence at the time of the Proclamation. The lease is for the operation of a gliderport on an emergency landing field built for pilot training during World War II. The lease is up for renewal and was inspected as part of the renewal process. Several safety issues were noted in the inspection and the lessee is working on rectifying the issues before BLM will renew the lease.

3

Year's Projects and Accomplishments

General Accomplishments

Signing of the Record of Decision for the RMP on February 19, 2013.

Successful outreach regarding recreational target shooting decision of the RMP.

- Tucson Field Manager Brian Bellew did a taped interview with KNST radio talk show host Paul Birmingham on March 15. This radio show typically supports Second Amendment rights. Birmingham lists target shooting as his hobby on his website biography. Bellew was prepared for a confrontational discussion. Fortunately, with all the facts presented, Birmingham said that he understands why the decision was made and he praised the BLM for working with local sportsmen to find an alternative shooting location.
- Tour of sites damaged by recreational shooting by District Director Julie Katsel and Constituent Services Representative Bob Brubaker from Senator Jeff Flake's office with Tucson Field Manager Brian Bellew and outdoor recreation planner Francisco Mendoza on March 15, 2013. Flake's office had requested the tour to get a firsthand look at the damage caused by recreational shooting at the Monument. Following the tour, Katsel and Brubaker commented that the BLM made the right decision.
- A map showing recreational shooting opportunities in the Tucson basin was distributed at the Tucson Field Office public room, Arizona Game and Fish Department's Region V Office, and by BLM law enforcement rangers. BLM law enforcement experienced mostly positive contacts with recreational shooters on the IFNM.
- IFNM staff, law enforcement, partners, authorized use holders, volunteers and neighbors all report substantial apparent decrease in target shooting on IFNM, with fewer shots heard, less new damage to vegetation, slower accumulation of shot-up trash.

Input for the Transportation and Travel Management Implementation Plan (TMIP) was gathered from authorized use holders and Arizona Game and Fish Department in a series of group and individual meetings. A presentation and materials were provided to the Tohono O'odham Nation to facilitate input from the Nation. The TMIP will be completed in FY14.

National Public Lands Day project in coordination with Friends of the Ironwood Forest (Friends) to pull buffelgrass on a site at Cerrito Represso on the Monument.

Fence repair work along the boundary with the Tohono O'odham Nation near the Sawtooth Mountains was initiated. The fence work will continue into FY14.

Operation ROAM. Rangers from throughout the BLM participate in operation ROAM (Reclaim our Arizona Monuments) several times each year to reduce illegal border smuggling activities and to provide safety for employees and volunteers completing resource restoration activities within the IFNM.

Current Areas of Focus

Drug and human smuggling activities impact the resources of the Monument through cross country driving and the creation of foot trails along with the trash left behind by the smugglers and their scouts. There is also an increased risk to employees doing field work as many of the drug smugglers and scouts are armed and drive recklessly on rough back roads. Operation ROAM is being used to combat the threats to employee safety and provide a law enforcement presence in high traffic areas, allowing crews to safely accomplish clean-up and reclamation of disturbed areas.

The United States Air Force initiated relinquishment of Titan II Missile Site 12, located in Avra Valley within the IFNM's boundary, back to BLM beginning in FY12. The process is continuing through FY14, with the possibility of utilizing the site as a dispersed recreation site with an interpretive element describing what the site was used for.

Significant Disturbances During the Past Year

A helicopter crash in the Waterman Mountains was fatal to a Pima County employee. The crash site required cleanup and restoration .

Education, Outreach, and Interpretation

Meet the Monument event held by the Friends to introduce area residents to the Monument in their own backyard that most people are not familiar with. The event schedule listed the following opportunities available to the public:

- Tom Wilson, University of Arizona: Botany of the IFNM
- Dr. Cecil Schwalbe and Royce Ballinger: Herpetofauna of the Sonoran desert featuring live reptiles and amphibians
- Felipe Molina: Yoeme (Yaqui) history and relationship to the IFNM
- Allen Morgan: How to Photograph the Desert
- 8-km Monument hike with the University of Arizona Ramblers Walking Club
- Yoeme Deer Dancers

Spring Hiking in the Monument consisted of three natural history hikes led by the Friends: to Cocoraque to view petroglyphs and explore vegetation types, to Ragged Top Mountain around the base (climbing to the top is prohibited during lambing season), and to Waterman Mountains to view elephant trees (only one species resides in the U.S.).

Restoration Site Tours. The Arizona Native Plant Society, Tucson Chapter has adopted and is actively working on restoration of an old decorative rock mill site within the Monument. This site is within the Waterman Mountains Vegetation Habitat Management Area, which was designated in the RMP to protect the Endangered Nichol's Turk's head cactus. They have given several site tours demonstrating the restoration techniques and the results of their work restoring the 18 -acre area back to native Sonoran Desert vegetation.

Pima Community College Earth Day. The IFNM park ranger and two SCC interns provided information on resources and recreational use of the IFNM, as well as career opportunities in the BLM, at the campus Earth Day celebration.

Partnerships

Friends of Ironwood Forest - Educational outreach events and stewardship service projects (National Public Lands Day, Meet the Monument, Hike the Monument), volunteer coordination.

Arizona Native Plant Society, Tucson Chapter (AZNPS)—buffelgrass control treatments including manual removal and herbicide application, especially on dispersed remote sites; Bermuda grass control; restoration including collecting and planting native seed, erosion control, and monitoring results; agave investigation; volunteer coordination.

Volunteers

Volunteers, under the supervision of a certified pesticide applicator, treated and monitored about 30 acres of the invasive grass species buffelgrass within the Waterman Mountains Vegetation Management Area, which was set up to protect an Endangered species of cactus.

The Friends recruited and coordinated volunteers to present several outreach and education events this year. One was Meet the Monument, which was designed to introduce residents of the Tucson and Marana metropolitan areas to the Monument. Another was a Hike the Monument, which included three separate day hikes that were guided to different areas showcasing such things as petroglyphs, Elephant trees and drought-adapted vegetation of the Sonoran Desert. Each hike had an expert on the subject of the hike along to educate the hikers regarding the objects in view (natural and cultural history, management and stewardship).

Budget

The budget for the IFNM for FY13 was \$688,601. This was broken down as \$578,601 base, \$25,000 directed base and \$85,000 one time . Labor costs were \$623,851, with \$260,822 going to IFNM staff and \$363,029 going to TFO staff for support work on the Monument. The fund code breakdown for the year was 1220 (recreation)—\$5,674, 1610 (Planning)—\$15,101 and 1711 (National Monuments & Conservation Areas)— \$667,826.

Land or Easement Acquisitions

The Monument staff is working on an acquisition of patented mining claims that are within the Waterman Mountains Vegetation Habitat Management Area, which was designated to protect the Endangered species Nichol's Turk's head cactus. The acquisition will be completed in FY14.

Science

Science

There were several science projects underway within the Monument, and additional projects were initiated in FY13. The first new project deals with “Species interactions involving the common Sonoran Desert parasitic plant, desert mistletoe” and is lead by the principal investigator Kelsey Yule from the University of Arizona. The project began in FY13 and will conclude in FY17. Key words for that study are: Sonoran riparian and scrub communities, *Phoradendron californicum*, *Prosopis*, *Parkinsonia*, *Acacia*, *Olneya*, multiple mutualistic partners, Ironwood Forest National Monument.

Long term monitoring of the population dynamics of Nichol’s Turk’s Head Cactus has been taking place on the Monument for over ten years. The Nichol’s Turk’s Head Cactus Working Group maintains a website with updated information on their activities at <http://indigo.cals.arizona.edu/turksheads/index>.

Future Science Opportunities

During geological surveys of the Monument, an area was identified that has the Mesozoic Formations that have been shown to contain vertebrate fossils within other National Conservation Lands units within the field office. The Museum of the Southwest is interested in conducting surveys of those formations for fossils, but has not been able to secure funding for the project. This project has been submitted for BLM funding several times, but has yet to be funded.

Status of the Unit’s Science Plan

The unit will be working on the IFNM Science Plan after finishing the TMIP and the RMP Implementation Strategy.

Resources, Objects, Values, and Stressors

Drought-adapted Vegetation

The landscape of the IFNM is swathed with the rich, drought adapted vegetation of the Sonoran Desert. Management objectives are to maintain viable natural populations of ironwood, palo verde, saguaros, and other drought-adapted vegetation within the Monument. Protection goal is to prevent avoidable loss of unique vegetation communities on Ragged Top and other rugged mountain ranges.

Drought-adapted Vegetation Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Stable

Drought-adapted Vegetation Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored
128,398	128,398	128,398	128,398

Stressors Affecting Drought-adapted Vegetation

The vegetation of the Sonoran Desert is adapted to drought so any effects of climate change are not currently noticeable. The major stressor is the invasion of Buffelgrass into the Monument. Buffelgrass is an introduced exotic grass from Africa that is fire-adapted and burns at temperatures well exceeding the maximum temperature that the native Sonoran Desert vegetation is capable of withstanding. Fire can be devastating to the desert vegetation and can eliminate most leguminous trees and cacti from the landscape.



Ancient Ironwood and Petroglyphs

Objects of Scientific Interest

The Monument contains objects of scientific interest throughout its desert environment. Stands of ironwood, palo verde, and saguaro blanket the Monument floor beneath the rugged mountain ranges, including the Silver Bell Mountains. Ragged Top Mountain is a biological and geological crown jewel amid the depositional plains in the Monument.

Objects of Scientific Interest Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Stable

Objects of Scientific Interest Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored
128,398	128,398	128,398	128,398

Stressors Affecting Objects of Scientific Interest

The biggest stressor to the Monument’s objects of scientific interest is the invasion of introduced buffelgrass. This species is fire-adapted and spreads rapidly within the Sonoran desert environment. The introduction of a fire regime into the desert results in the destruction of the native vegetation which is not adapted to fire.



Endangered Nichol Turk’s Head Cactus pop- ulation and survival monitoring.

Rugged Mountain Ranges

Protection goals are to maintain natural characteristics, processes, and scenic and wildlife values of geologic resources.

Rugged Mountain Ranges Status and Trend Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored
Total number of acres in unit	Number of acres inventoried for object or value	Number of acres found to possess object or value	Number of acres monitored (of those possessing object or value)
128,398	128,398	128,398	128,398

Rugged Mountain Ranges Inventory, Assessment, Monitoring Table

Status of Resource, Object, or Value	Trend
Good	Stable.

Stressors Affecting this Resource, Object, or Value

There are currently no stressors affecting this resource.



View of the Sawtooth mountains

Quintessential View of the Sonoran Desert with Ancient Legume and Cactus Forests

Protection goal is to maintain visual quality of landscapes from important viewing areas.

View of the Sonoran Desert with Ancient Legume and Cactus Forests Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Slightly declining. Silver Bell copper mine is expanding and raising some of it material dumps to higher levels, making the mining operations more visible from areas where it was not previously visible.

View of the Sonoran Desert with Ancient Legume and Cactus Forests Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Invento-	Acres Possessing Object	Acres Monitored
128,398	128,398	128,398	128,398

Stressors Affecting Quintessential View with Ancient Legume and Cactus Forests

Silver Bell copper mine is expanding and raising some of it material dumps to higher levels, making the mining operations more visible from areas where it was not previously visible.



Ragged Top from Silver Bell Peak

Ironwood Trees

The Monument contains unusually dense stands of ironwood trees, and stands of unusually large ironwood trees. Protection goals are to maintain viable natural populations of ironwood and prevent increased mortality of ironwood stands.

Ironwood Trees Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Stable

Ironwood Trees Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored
128,398	128,398	128,398	128,398

Stressors Affecting Ironwood Trees

The current long term drought has had some effect on the vigor and reproductive capacity of the ironwood trees. These trees have evolved to survive this type of drought, but do show some signs of stress.



Ironwood tree with Saguaro

Threatened, Endangered, and Special Status Species

The Monument is home to species federally listed as Threatened or Endangered, including the Nichol’s Turk’s head cactus and the lesser long-nosed bat. The desert bighorn sheep in the Monument may be the last viable population indigenous to the Tucson basin. Protection goals for these objects are to maintain a natural range of variation in vegetation communities to support rare species, and to prevent avoidable loss of special status species.

Threatened, Endangered, and Special Status Species Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Stable

Threatened, Endangered, and Special Status Species Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored
128,398	128,398	128,398	128,398

Stressors Affecting Threatened, Endangered and Special Status Species

The biggest stressor to the Monument’s Threatened, Endangered, and Special Status Species is the invasion of the introduced grass species buffelgrass. This species is fire-adapted and spreads rapidly within the Sonoran Desert environment. The introduction of a fire regime into the desert results in the destruction of the native vegetation which is not adapted to fire. Illegal cross country travel poses an additional threat to the endangered Nichol’s Turk’s head cactus.



Desert Bighorn sheep ram in the IFNM

Rock Art Sites and Archaeological Objects of Scientific Interest

The area holds abundant rock art sites and other archaeological objects of scientific interest. Humans have inhabited the area for more than 5,000 years. Protection goals for these objects are to reduce threats and resolve conflicts from natural or human-caused deterioration of rock art and other prehistoric sites, Archeological Districts on the National Register of Historic Places, artifacts, and remnants of Mission Santa Ana.

Rock Art Sites and Archaeological Objects of Scientific Interest Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Stable

Rock Art Sites and Archaeological Objects of Scientific Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored
128,398	15,536 (12.1%)	128,398	128,398

Stressors Affecting Rock Art Sites and Archaeological Objects

There are some impacts to known archaeological sites from soil erosion and some damage to rock art sites from humans. These impacts are being monitored on five sites annually, plus additional sites opportunistically, and actions to prevent further degradation are ongoing.



Pot shard's in the IFNM

Summary of Performance Measures

Overall the objects of the Monument are in stable condition with few threats to a couple of Resources, Objects, or Values of the Monument. There are some human impacts from smuggling activities, and a few from recreational activities. There is an impact on the vegetation and habitat of the Monument from an invasive grass that is bringing fire into a non-fire adapted ecosystem. All of the impacts are being monitored and addressed by Monument staff.

Summary Table*

Resource, Object, or Value	Status	Trend
Drought-adapted vegetation	Good, some threat from invasive plant species, treatment is keeping the threat in check.	Stable
Rugged mountain ranges	Good, will not change	Stable
Quintessential view of the Sonoran Desert	Good, although some VRM impact from adjacent mines	Stable
Ironwood trees	Stable	Stable
Habitat for threatened, endangered, and rare wildlife and vegetative species.	Good, although some effects are being seen from persistent drought.	Stable
Archaeological objects of scientific Interest	Good	Stable

Manager's Letter

The Ironwood Forest National Monument Resource Management Plan was approved on February 19, 2013. Among the many important decisions of the Record of Decision/ Approved RMP are (1) the designation of travel routes to provide access for allowable public and administrative use while protecting Monument objects, and (2) the prohibition of use and discharge of firearms within the IFNM except for lawful or authorized hunting activities conducted in accordance with hunting regulations. Both of these decisions provide important protection of Monument objects for sustainable use. The IFNM Transportation and Travel Management Implementation Plan will be completed next year, as will an Implementation Strategy for all of the decisions of the IFNM Resource Management Plan. These will strategically prioritize and guide the first five years of implementation of the RMP. This is an exciting time in which years invested in planning are beginning to transition into actions and projects which enhance or maintain the condition of the Monument's resources and the public's experience.

Claire Crow

Ironwood Forest National Monument Manager

Since becoming the Tucson Field Manager the third week of October, I have been astounded by the incredible resources I get to manage every day. I am so fortunate to be surrounded by an incredible leadership team and a highly talented group of employees. I look forward to an even more eventful year in 2014.

With much gratitude,

Vi Hillman

Tucson Field Manager



**NATIONAL
CONSERVATION
LANDS**

Ironwood Forest National Monument

Bureau of Land Management

Tucson Field Office

3201 E Universal Drive

Tucson, AZ 85756

Phone: 520-258-7200

July 7, 2014

The mention of company names, trade names, or commercial products does not constitute endorsement or recommendation for use by the federal government.